

Fig. 1(a)

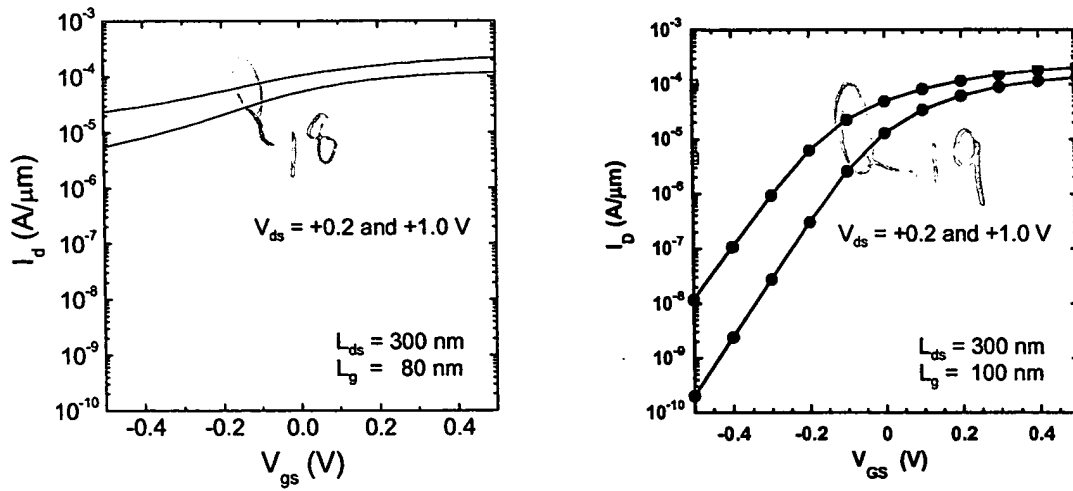


Fig. 1(b)

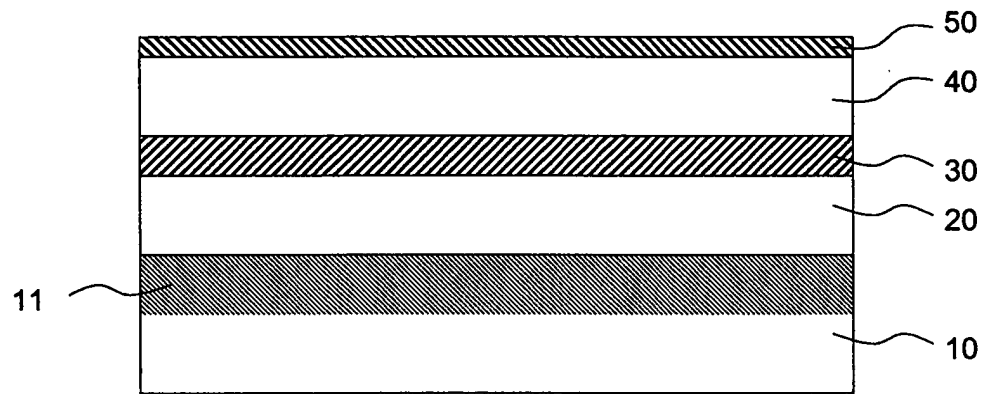


Fig. 2

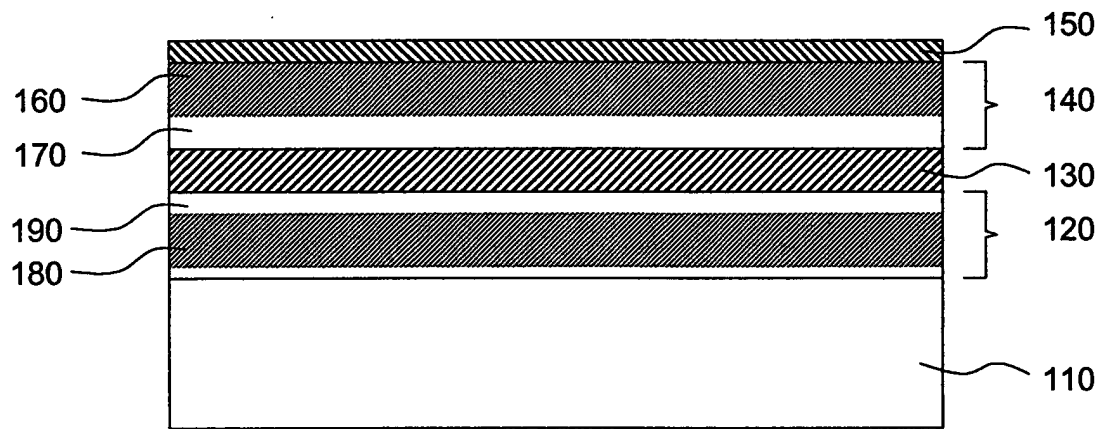


Fig. 3

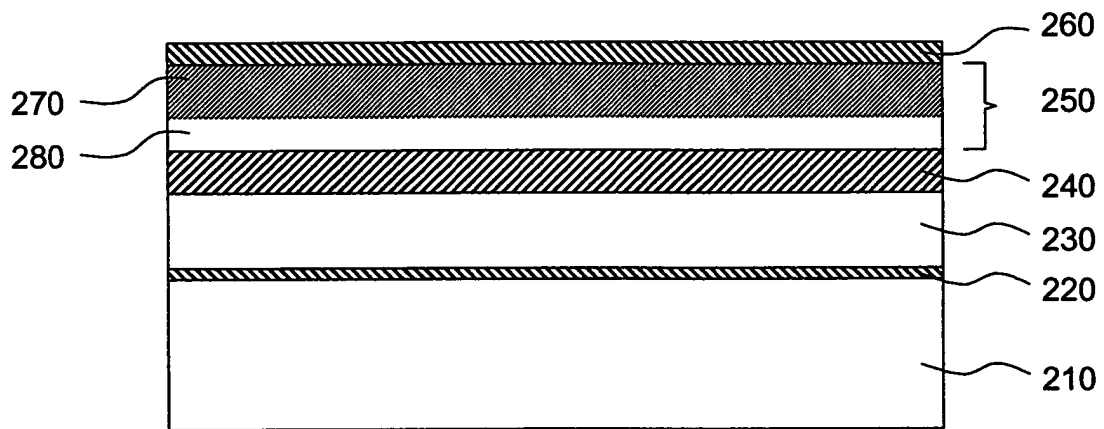


Fig. 4.

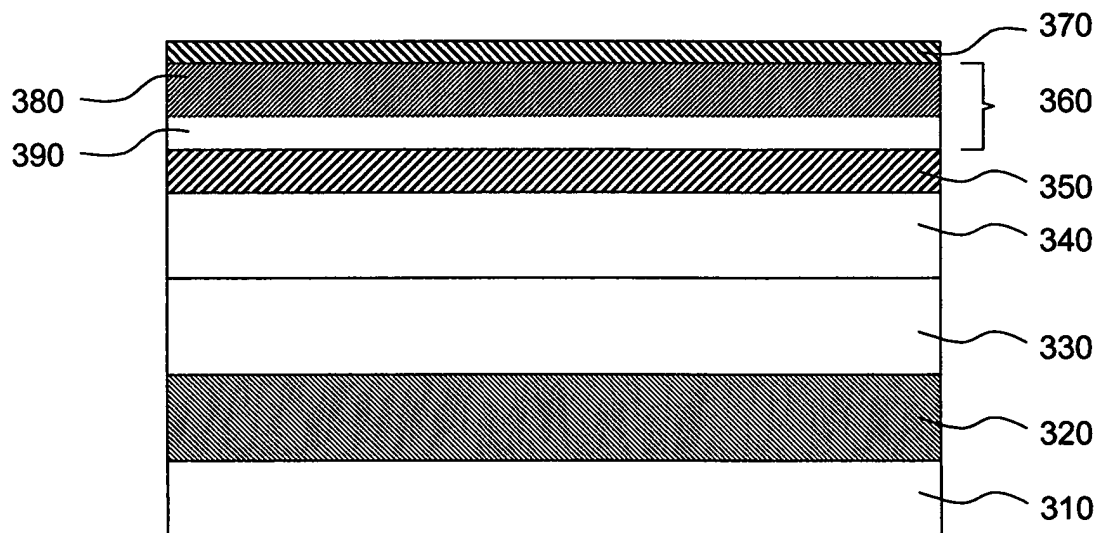


Fig. 5.

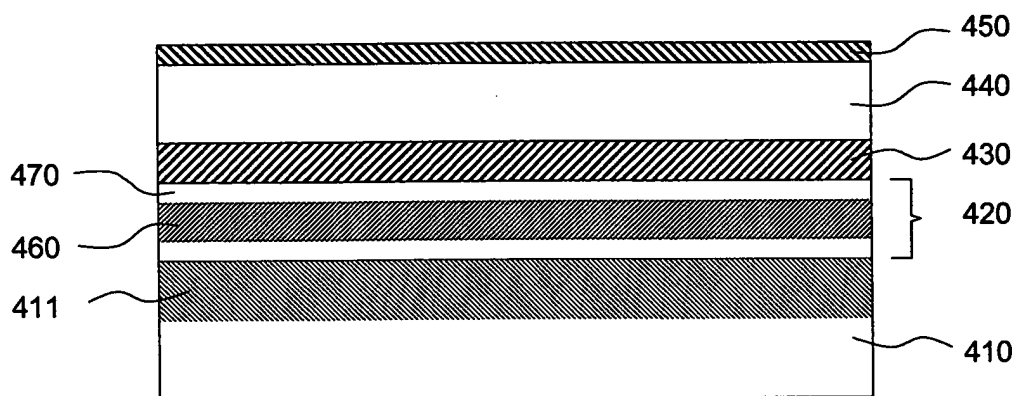


Fig. 6

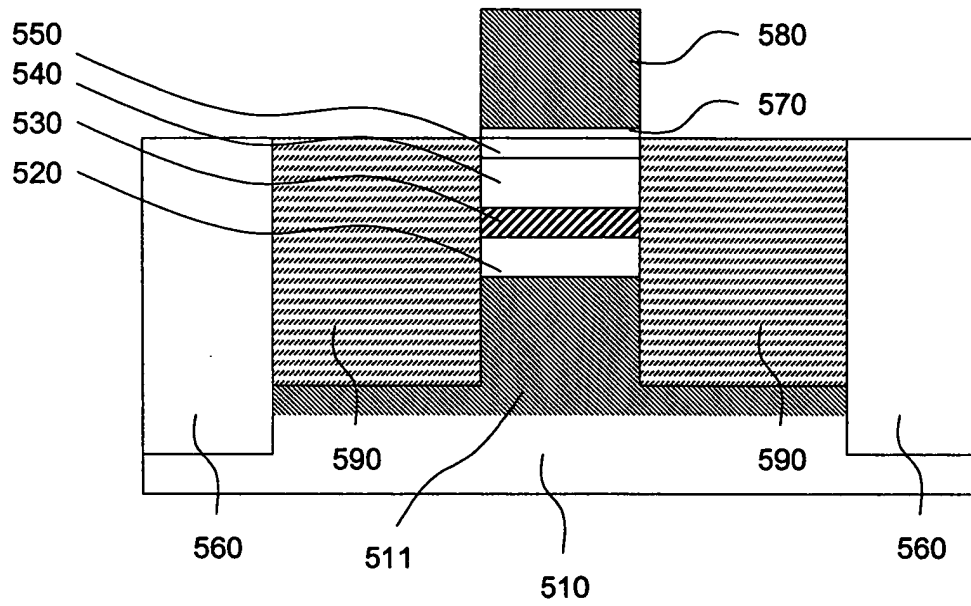


Fig. 7

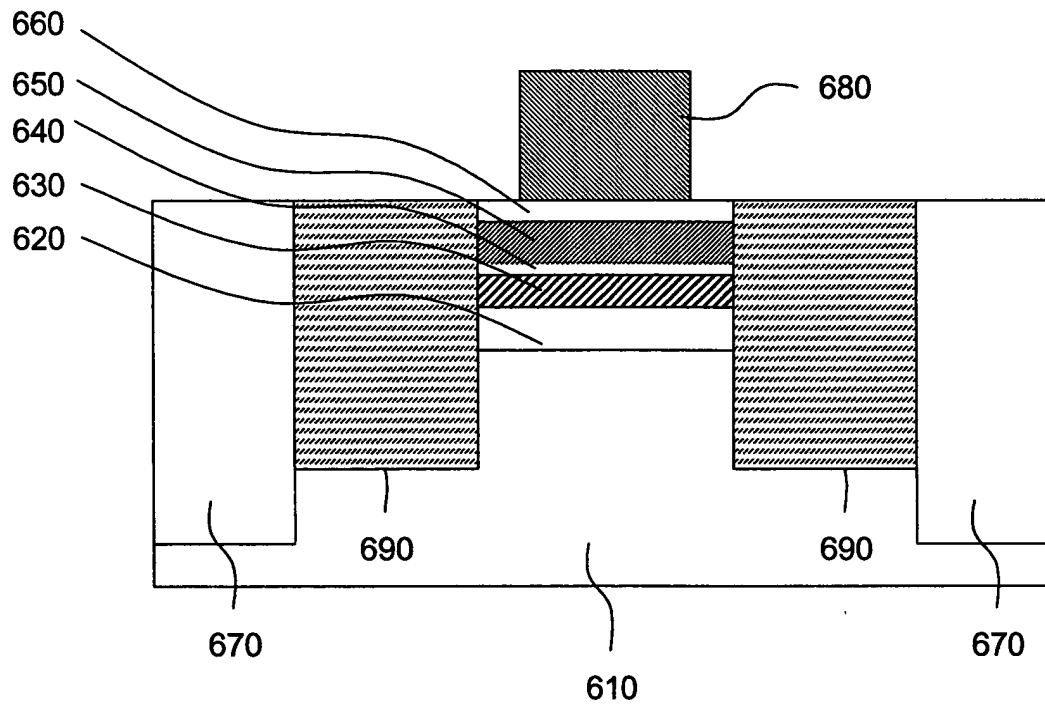


Fig. 8



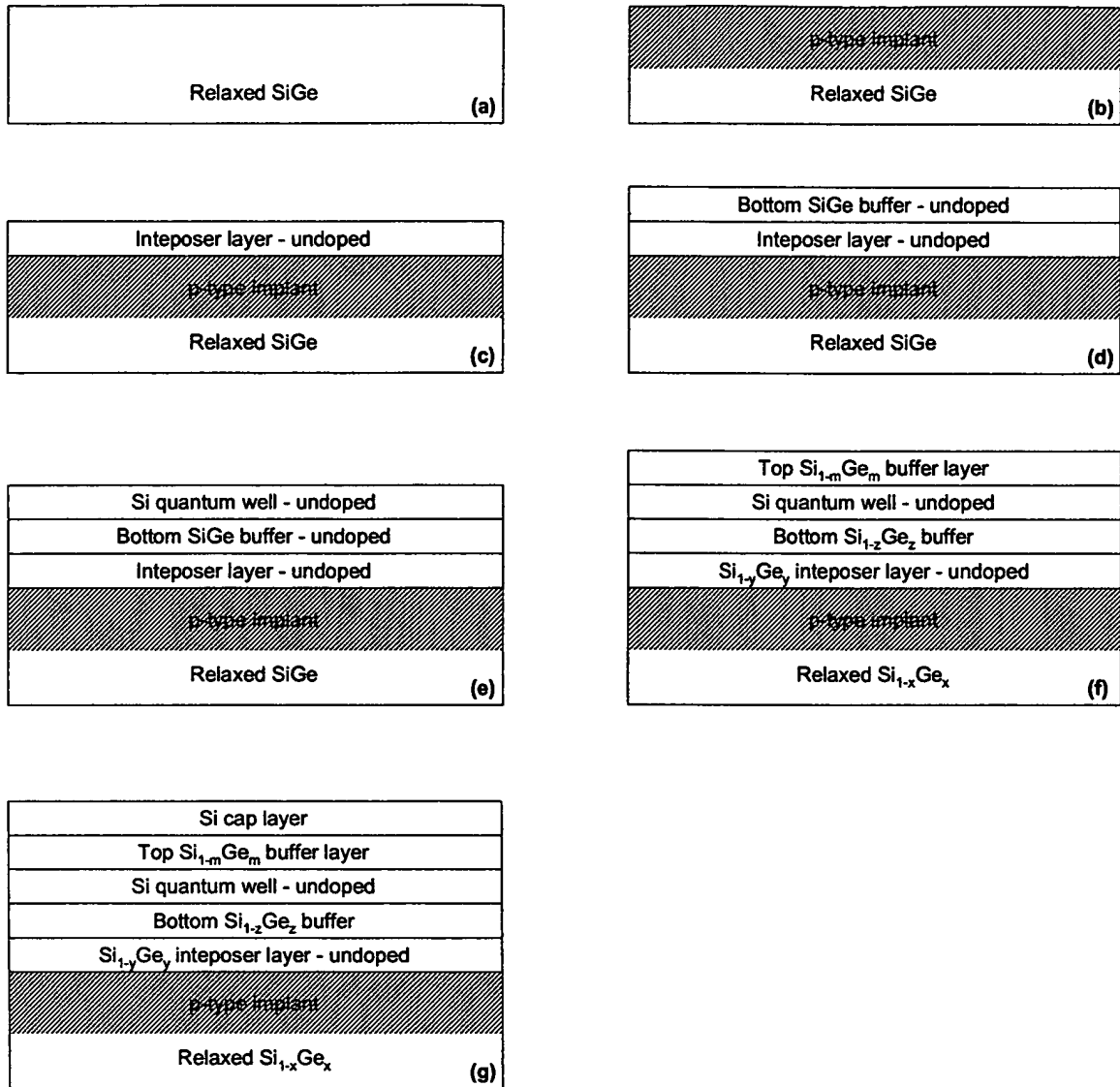


Fig. 9.

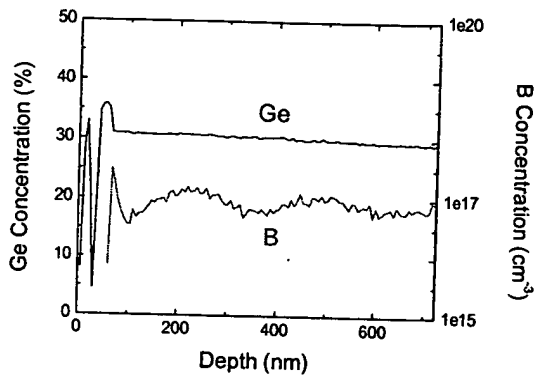


Fig. 10(a). SIMS plot a multi-layer structure with implanted p-well doping, and regrown Si/SiGe modulation-doped quantum well layer structure.

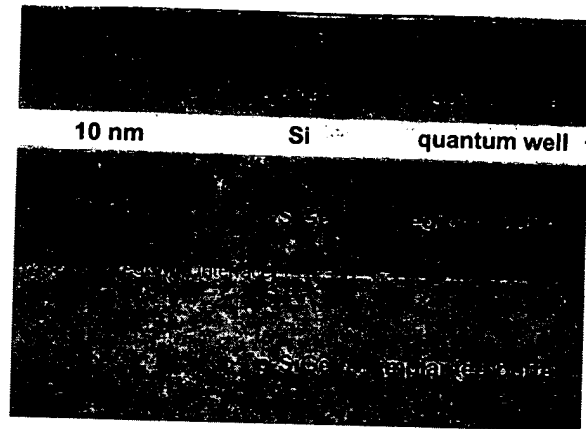


Fig. 10(b). Cross-sectional TEM of a multi-layer structure with implanted p-well doping, and regrown Si/SiGe modulation-doped quantum well layer structure.

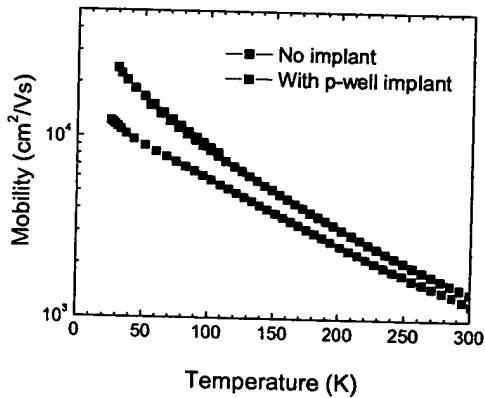


Fig. 10(c). Mobility vs. temperature data for Si/SiGe modulation-doped quantum well layer structures with and without p-well doping. The p-well doping has minimal impact on the room-temperature mobility.